

University of Colorado

Speaker Guidelines for Continuing Education Activities

Introduction

The following points have been compiled by the CU Skaggs School of Pharmacy and Pharmaceutical Sciences and CU College of Nursing for speakers who are presenting at educational programs that are accredited for nurses, pharmacists and physicians. If you keep these points in mind as you design and give your presentation, you will fulfill the accreditation requirements for CNE, CME, and CPE and the [Standards for Commercial Support \(SCS\)](#).

Avoidance of Commercial Bias

- You will be asked to complete a disclosure form before the program and provide the audience with your disclosure information.
- Use generic names for therapeutic agents. Even if only one company makes a drug, and thus only one trade name, the SCS mandate use of the generic name (e.g., use ibuprofen, not Motrin). The only time that trade names can be used is if the trade names of several companies are being used.
- Use generic, not brand, designations for diagnostic equipment.
- Avoid the use of commercial company names.
- Do not show graphics of medical devices, medications, or any product with a visible trade mark, name or logo of a commercial interest in your slides or other educational materials.
- Do not provide commercial website addresses (.com) for information purposes if the website promotes commercial or trademarked items. Website addresses for non-profit, government, university, or foundation organizations (.org, .gov, .edu) may be referenced as informational resources.

Educational Design – Learning Objectives

As an experienced educator, you have probably written many learning objectives. Remember the objectives should be SMART and indicate what the participant should be able to DO at the end of your presentation:

Specific -- what observable behavior is expected?

Measurable – Can the desired behavior be observed or measured?

Attainable – Can the participants learn this knowledge or skill in the allotted time for your talk?

Relevant – Content and activities should relate to the participants' practice

Timed -- When do you want the participants to attain this learning outcome?

Page 3 gives examples of appropriate verbs to use for various levels of learning.

Educational Design – Engaging Your Audience

Educational experts tell us that memory is enhanced when (1) information is relevant, (2) given in small packets (adult attention span is about 8 minutes), and (3) the learners are challenged to apply or retrieve information more than once through the program. Here are some ways to incorporate active learning : case studies, discussion, Q/A, hands-on participation, panel discussion, patient demos, audio-visual aids (such as a video), audience response system, interspersed quizzes or questions, think-pair-

share exercises, brainstorming, small group discussions, and role-playing. Active learning does reduce the time for didactic lecturing, but does increase retention.

Educational Design – Learning Assessment

How do you and the participants know whether they've learned what they came to learn? Learning assessment determines if the learner has achieved the program's stated learning objectives. As you think of the active learning activities you will include, you can design them to include learning assessment. You should also include a way to provide feedback to the participants on their learning. If you ask questions, you should provide the correct answers through discussion or teaching, so that participants can determine whether their thinking was correct.

This table shows some ways to assess learning.

Activity Type	Suggested Learning Assessments
Knowledge-Based Presentations	Test recall of facts: <ul style="list-style-type: none">• Questions on session content (e.g., multiple choice, true/false)• Pre- and post-tests• Other use of questions, tests, quizzes• Games that promote recall of facts and information
Application-Based Presentations	Test interpretation of: <ul style="list-style-type: none">• Case studies• Interactive scenarios• Exercises that allow participants to apply new skills

Educational Materials

Participants expect to receive either paper or online copies of your presentation. Certainly this is helpful, but we encourage you to also provide other resources such as copies of treatment algorithms, lists of references, websites, or other useful publications for further reading. These additional materials can be used to help participants apply the information in their professional practice, and share information with others.

For Further Information

We hope this information has been useful and complements other speaker guidance you have received.

For questions about these educational guidelines, contact Kathleen McCartney, CPE Coordinator (Kathleen.mccartney@ucdenver.edu; 303-724-3549) or Ben Westergaard, CPE Program Administrator (Benton.Westergaard@ucdenver.edu; 303-724-4298).

Writing Learning Objectives – Bloom’s Taxonomy

Bloom’s taxonomy of learning outcomes can be used to help write learning objectives that reflect specific and measurable changes in behavior as a result of learning. The table progresses from the simplest level of knowledge (recall of facts) to higher levels requiring the application and integration of information.

Learning Outcomes	Evidence of Outcomes	Terms for Outcomes (verbs to use in objectives)
Knowledge (recall data or information)	Knows common terms, specific facts, methods or procedures, basic concepts or principles	Define, describe, identify, label, list, locate, match, memorize, name, outline, recall, reproduce, select, state
Comprehension (state a problem in one’s own words)	Understands facts, principles, interprets verbal material, graphs, tables, estimates outcomes implied in data	Convert, defend, discuss, distinguish, estimate, explain, extend, generalize, give example, identify, infer, outline, paraphrase, predict, rewrite, summarize
Application (use a concept in a new situation)	Applies concepts, principles to new situations, solves mathematical problems, constructs graphs, charts, demonstrates method or procedure	Change, compute, demonstrate, discover, make, manipulate, modify, operate, predict, prepare, produce, relate, show, solve, translate, use
Analysis (separates material into component parts)	Recognizes unstated assumptions, fallacies in logic and reason, distinguishes between facts and inferences, evaluates relevance of data, analyzes an organizational structure	Analyze, break down, compare, contrast, diagram, differentiate, discriminate, distinguish, identify, illustrate, infer, outline, point out, relate, select, separate, subdivide
Synthesis (uses parts to create new meaning or structure)	Writes well organized theme, proposes a research plan, integrates learning from different areas, formulates new scheme for classifying objects	Categorize, combine, compile, compose, create, devise, design, explain, generate, modify, plan, organize, rearrange, reconstruct, relate, reorganize, revise, rewrite, summarize, tell, write
Evaluation (makes judgments of the value of ideas or materials)	Judges logical consistency of a written passage, adequacy with which conclusions are supported by data	Appraise, compare, conclude, contrast, criticize, describe, discriminate, explain, justify, interpret, relate, summarize, support

*Please note that verbs like know, learn, comprehend and understand are not listed; these verbs are not easily measurable or observable. As an example, consider the following two learning objectives:

- Know the usual dose of acetaminophen for the treatment of osteoarthritis.
- State the usual dose of acetaminophen for the treatment of osteoarthritis.

Asking the learner if he/she knows the usual dose requires only a “yes” or “no” answer. Having the learner state the usual dose allows us to assess whether the learner has attained the objective.

More Examples of Learning Objectives:

Knowledge-based:

At the conclusion of this presentation, the learners will be able to...

- List six antidepressant medications used for the treatment of hot flashes.
- Identify five factors associated with adherence to second-generation antipsychotic used for schizophrenia.
- State the three most common organisms that cause uncomplicated bladder infections.
- Explain the relationship between learning objectives, active learning and assessment.

Application-based:

- Demonstrate the correct technique for two types of asthma inhalers used in current practice.
- Recommend an appropriate dyslipidemia treatment plan for reducing cardiovascular risk in a primary prevention patient.
- Implement a regimen to transition with type 2 diabetes to insulin therapy.
- Recommend changes to a patient’s medication regimen based on lab test results.